# Article information:

Resilient control under Denial-of-Service: Robust design - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0005109817300419?via%3Dihub=>

# Article summary:

1. CPSs (cyber-physical systems) have raised concerns about networked control in the presence of cyber attacks, particularly Denial-of-Service (DoS) attacks that can compromise the availability of data and induce closed-loop instability by blocking plant-controller communication.

2. Previous studies have addressed optimal control and DoS attack strategies, zero-sum games between controllers and strategic jammers, identifying salient features of DoS signals, and explicit characterization of DoS frequency and duration for which closed-loop stability can be preserved by means of state-feedback controllers.

3. This paper focuses on designing maximally robust controllers for networked systems subject to DoS attacks, introducing a measure of robustness against DoS related to the average percentage of tra.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

作为一篇科技论文，该文章的内容相对客观，但仍存在一些偏见和缺失的考虑点。

首先，文章只关注了网络控制系统中的DoS攻击，而忽略了其他类型的网络攻击。这可能导致读者对网络安全问题的理解不够全面。

其次，文章没有提到DoS攻击可能会对人类生命造成威胁。例如，在医疗设备或交通系统中使用网络控制时，DoS攻击可能会导致严重后果。因此，在讨论网络安全问题时应该更加注重人类生命和财产安全。

此外，文章没有探讨如何预防DoS攻击或减轻其影响。虽然文章提到了一些控制策略和方法，但并没有提供实际应用方案或建议。

最后，文章似乎偏袒技术解决方案而忽略了社会、政治和经济因素对网络安全的影响。例如，在某些情况下，政治动机可能是发起DoS攻击的主要原因之一。因此，在解决网络安全问题时需要综合考虑多种因素。

总之，尽管该文章在技术层面上提供了有价值的信息和洞见，但它也存在一些偏见和缺失的考虑点，需要更全面地考虑网络安全问题。

# Topics for further research:

* Other types of network attacks
* Threats to human life and property
* Prevention and mitigation of DoS attacks
* Practical application and recommendations
* Social
* political
* and economic factors in network security
* Comprehensive consideration of multiple factors in addressing network security issues

# Report location:

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